Foundation Interleaving Quiz
Branch 12
Quizzes 1 to 3
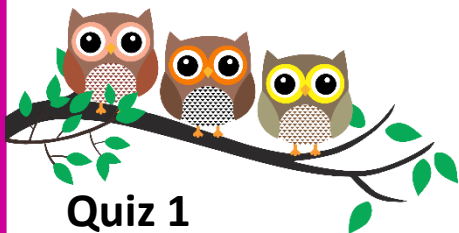
Quiz 1

Q	Topic	∑	R	A	G
1	Estimation				
2	Simultaneous Equations				
3	Perimeter, Area and Volume				
4	Averages				

Home Study Focus

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Home Study Completed ☐

Quiz 2

Q	Topic	∑	R	A	G
1	Percentage problem.				
2	Expand and Simplify				
3	Angle Problems				
4	Mean from a Table				

Home Study Focus

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Home Study Completed ☐

Quiz 3

Q	Topic	∑	R	A	G
1	Ratio Problem				
2	Form and Solve Equations				
3	Right Angled Trigonometry				
4	Frequency Tree				

Home Study Focus

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Home Study Completed ☐
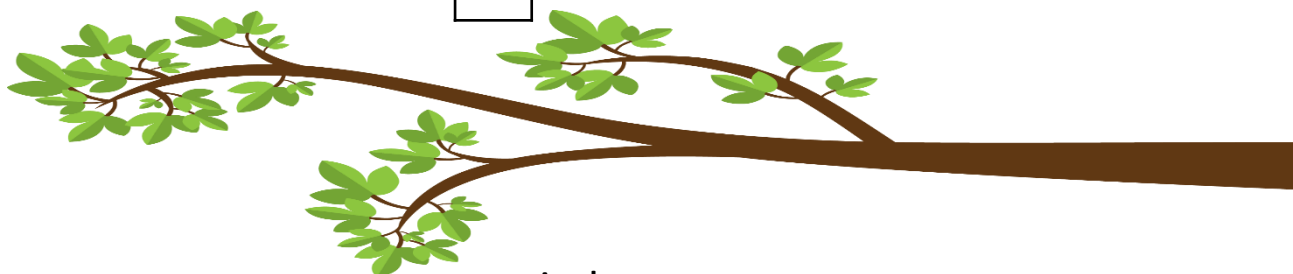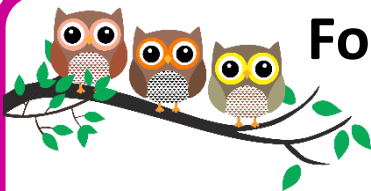
Foundation Interleaving Quiz

Branch 12 Quiz 1

1) Estimate the value of **(2 marks)**

$$\frac{\sqrt{396} + 15.9}{3.246}$$

_____

_____

Answer: _____

2) Miss B buys 22 bags of sweets for her form class.

There are x bags that cost 10p each.

There are y bags that cost 8p each.

a) Write down an equation connecting x and y.

(1 mark)

_____

Answer: _____
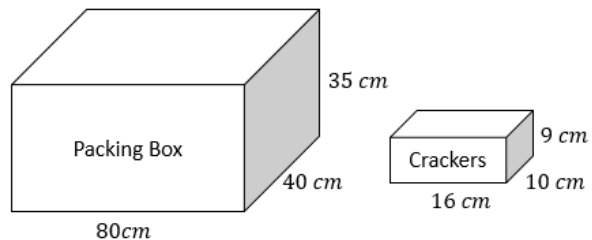
b) The total cost of the bags is £1.92.
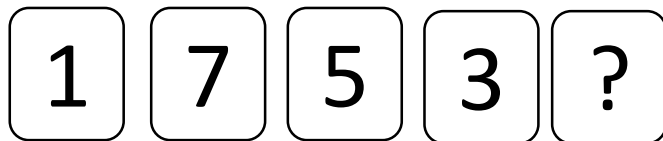
Use algebra to work out the values of x and y.

You must show your working out. **(4 marks)**

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_____

$x =$ _____ $y =$ _____

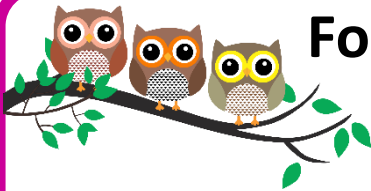3) George is packing boxes to be shipped to a store. How many boxes of crackers will fit inside each box? **(3 marks)**

Packing Box — 35 cm, 40 cm, 80cm

Crackers — 9 cm, 10 cm, 16 cm

_____

_____

_____

4) David has 5 cards. **(5 marks)**

| 1 | 7 | 5 | 3 | ? |

Four of the cards are faced upwards and one is facing downwards

a) What would the mystery card have to be to make a mode of 5?

b) What would the mystery card have to be to get a mean of 4?

c) What would the mystery card have to be to have a range of 8?

d) What would the mystery card have to be to have a median of 3?

Q	Topic	Σ	R	A	G
1	Estimation				
2	Simultaneous Equations				
3	Perimeter, Area and Volume				
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Foundation Interleaving Quiz
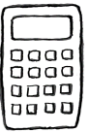
Branch 12 Quiz 2

1) Adiqa wants to invest £400 into savings for 3 years.
   Which account should he put his money in?
   Account A: Interest 3.5% for the first year and 1.5% each subsequent year.
   Account B: Interest 2% Annually **(3 marks)**

   Answer: _____

2) a) Expand and simplify
   $$x + 2(x - 3)$$ **(1 marks)**

   Answer: _____

   b) Factorise Fully $18x^2y + 12y^2$ **(2 marks)**

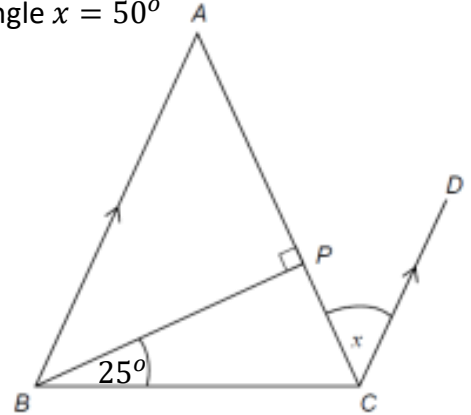   Answer: _____

   c) Factorise and solve
   $$x^2 + 2x - 35 = 0$$ **(3 marks)**

   Answer: _____

3) ABC is a triangle with AB=AC
   BA is parallel to CD.
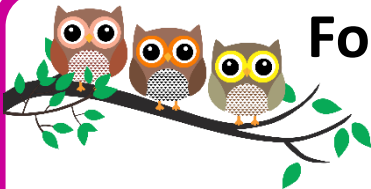   Show that angle $x = 50^o$ **(3 marks)**

4) There are 250 runners in the borders half marathon. **(3 marks)**
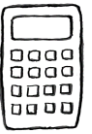
Time (t) in mins	Frequency		
$80 < t \leq 120$	60		
$120 < t \leq 140$	90		
$140 < t \leq 180$	100		
$t > 180$	0		

Estimate the mean time

Answer: _____

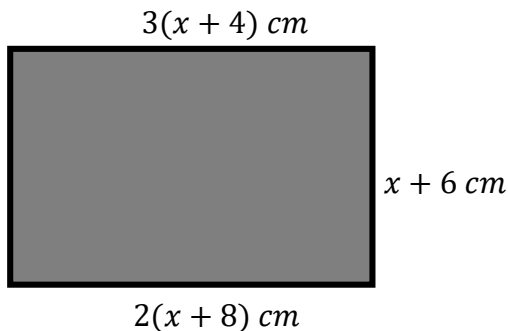| Q	Topic	Answer:	$\sum$	R	A	G
1	Percentage problem.					
2	Expand and Simplify					
3	Angle Problems					
4	Mean from a Table					

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Foundation Interleaving Quiz

Branch 12 Quiz 3

1) Adam, Jake and Sally share sweets in the ratio of $3:5:7$
Adam has 105 less sweets than Sally.
How many sweets does Jake have? *(3 marks)*

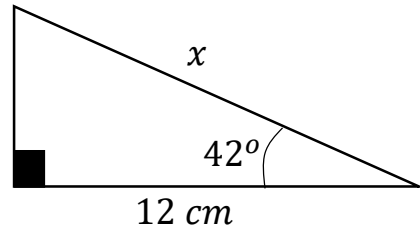_____

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2) Here is a rectangle.

$3(x + 4)\ cm$

$x + 6\ cm$

$2(x + 8)\ cm$

What is the perimeter? *(5 marks)*

_____

_____

_____

_____

_____

_____

Answer: _____

3) Workout the length of x *(3 marks)*

x

42°

$12\ cm$

_____

_____

_____

Answer: _____

4) 50 passengers were on a bus.
14 people were male.
Male adults to children were in the ratio of 5:2
25 adults in total.

a) Complete the frequency tree. *(3 marks)*

50
M
F
A
C
A
C
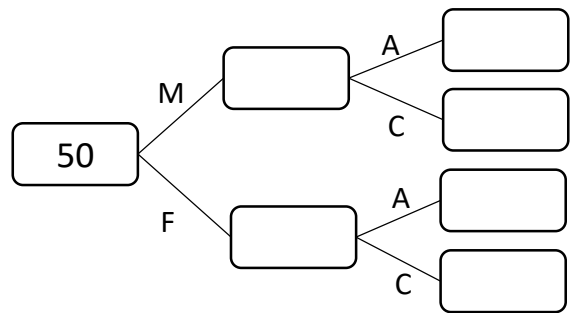
b) What proportion of the passengers were children? *(1 marks)*

Answer: _____

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